REMARKS

Reconsideration of the present application is respectfully requested.

Claims 1, 8 and 9 stand rejected under 35 USC §102(b) over Auwarter et al. Applicants respectfully disagree since a §102(b) rejection requires that a reference disclose exactly what an Applicant has claimed. In this case, the cited reference does not even appear to contemplate engine compression release braking, and therefore can not properly be interpreted to disclose a fuel injector with an insulator coating for protection against overheating due to engine compression release braking. Apart from this fact, Auwarter et al. teach a fuel injector with a single nozzle outlet, whereas Applicant claims a plurality of nozzle outlets, and Applicant's claims require that the metallic insulator be attached at a contact with the metallic tip outer surface. Auwarter et al., on the other hand, teaches a thin metallic cap interposed between its insulating layer and the injector tip. Therefore, there are at least three limitations in Applicant's claims that are not shown or suggested by Auwarter et al. Therefore, Applicant respectfully requests that the outstanding §102(b) rejections based upon Auwarter et al. be withdrawn.

In addition to the reasons set forth with regard to claim 1, claim 8 should be allowable since Auwarter et al. can not possibly anticipate what it does not appear to contemplate. In particular, Applicant has recognized that an injector tip can be subjected to substantially more heat transfer during engine compression release braking than it would otherwise be exposed to during normal engine combustion operations. There is absolutely no evidence of record to support the notion that the Auwarter et al. injector could inherently protect its valve seat from reaching its tempering temperature when exposed to conditions corresponding to simultaneous engine compression release braking and exhaust braking, as per Applicant's claimed fuel injector. Auwarter et al. can not properly be said to anticipate that which it does not contemplate or recognize. Therefore,

the §102(b) rejection against claim 8 should be withdrawn over and above the reasons set forth with regard to claim 1.

Claims 1, 3, 4, 8, 9 and 11 stand rejected under 35 USC §102(e) over Kato et al. Again, Applicant respectfully disagrees since a §102(e) rejection requires that the cited reference show exactly what an Applicant has claimed. In this case, Kato et al., like the Auwarter et al. reference, fails to contemplate its use in an engine equipped with an engine compression release braking system. In addition, Kato et al. teaches a spark ignition engine, which inherently suggests cylinder temperatures well below that likely during engine compression release braking. In addition, Applicant's claims require that the insulating layer be attached at a contact with the outer surface of the injector tip. Kato et al., on the other hand, does not even teach attachment of an insulator to its injector tip, let alone an insulator attached where it comes in contact with the injector tip. In fact, the Kato et al. insulator is held in place adjacent the injector tip only when the fuel injector is mounted in an engine. In other words, it would be unfair to characterize Kato et al.'s insulator as being attached to anything; the only fair characterization would be that the Kato et al. insulator is held in position between a fuel injector and the engine block. Finally, Kato et al. only appears to teach a fuel injector with a single nozzle outlet, whereas Applicant's claims require a plurality of nozzle outlets. Therefore, Applicants respectfully request that the §102(e) rejections against claims 1, 3, 4, 8, 9, and 11 be withdrawn.

Applicants respectfully assert that claims 8 and 11 should be allowable in view of Kato et al. over and above the reasons set forth above with regard to their respective base claims. In particular, there should be no dispute that Kato et al. is directed to a marine application, and thus inherently teaches away from an engine equipped with engine compression release brakes and any solutions associated with the use thereof. In other words, Kato et al. teaches a spark ignited engine with relatively low temperatures

installed in an marine outboard motor, and inherently fails to recognize a need for, or how to protect, a fuel injector tip during the extreme temperatures associated with some engine compression release braking operations. Therefore, Applicants respectfully request that the outstanding rejections against claims 8 and 11 be withdrawn over and above the reasons set forth with regard to their respective base claims 1 and 9.

Claims 2-7, 10 and 11 stand rejected under 35 USC §103(a) over Auwarter et al. Claims 2, 5-7 and 10 stand rejected under 35 USC §103(a) over Kato et al. Ample case law has established a rule that the discovery of the source of a problem may result in a patentable invention despite the fact that the solution would have been obvious once the source of the problem was discovered. *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 US 45 (1923); *In re Peehs*, 612 F.2d 1287, 204 USPQ 835 (CCPA 1980).

> A patentable invention may lay in the discovery of the source of a problem even thought the remedy may be obvious once the source of the problem is identified. This is part of the "subject matter as a whole" which should always be considered in determining the obviousness of an invention under 35 USC §103.

Id. 612 F.2d at 1290, 204 USPQ at 837. The *Peehs* Court goes on to require that an examiner should have to provide evidence that a person of ordinary skill in the art at the time of the invention was made would have expected the problem to exist in order to support a §103 rejection. In this case, there is absolutely no evidence of record that anyone other than Applicant has recognized the extreme heat transfer conditions imposed on an injector tip during some engine compression release braking operations. Therefore, all of the §103 rejections against Applicant's claimed solution to this problem should be withdrawn.

Claims 12-20, which were previously withdrawn, have now been cancelled. In their place, new claims 21-27 have been added. These claims are believed allowable over the art of record. No additional fee should be required for these claims, as the total number of claims remains under 20, of which 3 are independent claims. Nevertheless, the Commissioner is authorized to charge any underpayment or credit any overpayment to deposit account number 500226.

This application is now believed to be in condition for allowance of claims 1-11 and 21-27. However, if the Examiner believes that some minor additional clarification would put this application in even better condition for allowance the Examiner is invited to contact the undersigned attorney at (812) 333-5355 in order to hasten the prosecution of this application.

Respectfully Submitted,

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